

REMARKS/ARGUMENTS

Claims 15-18 and 20-26 stand rejected, with claim 19 objected to in the outstanding Official Action. Claims 15, 18 and 25 have been amended and claim 17 has been cancelled without prejudice. Accordingly, claims 15, 16 and 18-26 remain in this application.

The Examiner's indication of acceptability of Applicants' originally filed formal drawings is very much appreciated. Additionally, the Examiner's acknowledgment of Applicants' claim for priority and receipt of the certified copy of the priority document is very much appreciated. Finally, the Examiner's consideration of the prior art submitted in Applicants' previously filed Information Disclosure Statements is appreciated.

Claims 15 and 16 stand rejected under 35 USC §102 as being anticipated by Sotodani (JP 402251804). The Court of Appeals for the Federal Circuit has noted in the case of *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 USPQ 481, 485 (Fed. Cir. 1984) that "[a]nticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim."

Applicants have amended claim 15 to include the limitation from claim 17, i.e., the specification that "the end of the cladding material is tapered and the thinnest portion of the taper is directed towards the first portion of the core." Inasmuch as claim 17 was not alleged to be anticipated by Sotodani, the rejection of claims 15 and 16, which now include the limitation of claim 15, is obviated by this amendment and any further rejection thereunder with respect to Sotodani is respectfully traversed.

Claims 15, 17, 18, 20, 25 and 26 stand rejected under 35 USC §102 as being anticipated by Uda (JP 405157949). The Examiner appears to be of the opinion that pipe 5 comprises a

cladding material having a "refractive index suitable for guiding the electromagnetic radiation along the second longitudinal portion of the core" as required in claim 15. Pipe 5 is indicated in the "CONSTITUTION" portion of the translation of the Uda reference as being a "slender coating pipe (metallic pipe) 5."

While the Uda pipe could have a reflective inner surface which might be sufficient for guiding electromagnetic radiation, Applicants' claim specifically requires this cladding material to have "a refractive index suitable for guiding the electromagnetic radiation." The Examiner does not indicate how or in what fashion he believes a metallic pipe has a refractive index (not a reflective index). Refraction, as is well known to those of ordinary skill in the art, is a phenomena arising from different velocities at which electromagnetic radiation propagates through materials. In this instance, because the invention is an optical fiber, the electromagnetic radiation is optical radiation, whether ultraviolet, infrared or visible optical radiation. Therefore, the material specified is limited to those materials having "a refractive index" which is suitable for guiding this radiation. Metal simply does not have a suitable index of refraction.

Thus, Uda, in teaching a metallic pipe, clearly fails to anticipate or render obvious the subject matter of independent claims 15 and 25. How or where the Examiner believes Uda teaches a pipe having any "refractive index" much less a refractive index which is "suitable for guiding the electromagnetic radiation" is not seen and clarification is requested. Absent an indication of the claimed "refractive index" in the Uda reference, it is clear that claims 15, 17, 18, 20, 25 and 26 are not anticipated by Uda and any further rejection thereunder is respectfully traversed.

Claims 21-24 also stand rejected as unpatentable under 35 USC §103 over the Uda reference. Because the Uda reference teaches a metal pipe cladding, it teaches away from a cladding material having "a refractive index suitable for guiding the electromagnetic radiation" and therefore the subject matter of claims 21-24 would be non-obvious in view of Uda.

Claims 22-24 also stand rejected under 35 USC §103 as unpatentable over Sotodani. As noted above, the Sotodani reference does not include cladding material which has a tapered end or which has the thinnest portion of the taper directed towards the first portion of the core as set out in Applicants' independent claim 15, from which claims 22-24 depend. Again, should the Examiner believe there to be any such teaching in Sotodani, he is respectfully requested to identify that portion.

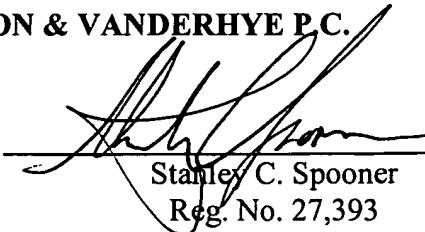
The indication of the existence of allowable subject matter in dependent claim 19 is very much appreciated. However, inasmuch as claim 19 depends from claim 15 and claim 15 is believed allowable over the Sotodani and Uda references, there is no need to amend claim 19 to read in independent form. The indication of allowable subject matter, however, is very much appreciated.

Having responded to all objections and rejections set forth in the outstanding Official Action, it is submitted that remaining claims 15, 16 and 18-26 are in condition for allowance and notice to that effect is respectfully solicited. In the event the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the above claims, he is respectfully requested to contact Applicants' undersigned representative.

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Respectfully submitted,

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